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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,369	09/16/2003	Youichi Matsuyama	02-100	9413

23400 7590 06/24/2004

POSZ & BETHARDS, PLC  
11250 ROGER BACON DRIVE  
SUITE 10  
RESTON, VA 20190

EXAMINER

MULLINS, BURTON S

ART UNIT	PAPER NUMBER
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2834

DATE MAILED: 06/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Applicant No.

10/662,369

Applicant(s)

MATSUYAMA ET AL.

Examiner

Burton S. Mullins

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4 and 13 is/are rejected.
- 7) ☒ Claim(s) 3,5-12 and 14-16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

2. The information disclosure statement (IDS) submitted on 16 September 2003 has been considered by the examiner.

### ***Claim Objections***

3. Claims 2-3 and 7 are objected to because of the following informalities: The phrases "is installable to" and "is installable into" should be ---is installable in---. Appropriate correction is required. Similarly, in claims 5, 9 and 12, "installed into" should be --installed in---. Also in claim 5, "before installation...into the gear housing" should be --before installation in the gear housing--.

### ***Claim Rejections - 35 USC § 112***

4. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Recitation "in an inserting direction of the control circuit board to the gear housing" is vague and indefinite. Does this refer to the direction that the control circuit board is inserted into the gear housing?

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-2 and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Schwital et al. (US 6,742,413). Schwital teaches an electric motor comprising (Fig.1): a motor main body 10 that is rotated upon energization of the motor main body; a speed reducing unit that includes: a speed reducing mechanism (worm 24) that reduces rotational speed of the motor main body; and a gear housing 40/42/52 that receives the speed reducing mechanism; a control circuit board 26 that is held in the gear housing 40/42/52 and has at least one electric circuit component (28 & 44; Fig.2); a connector housing (not numbered, Figs.1,4&5) that is provided on the gear housing 40/42/52 and is connectable with an external connector (not shown, inherent), wherein the connector housing is formed separately from the gear housing (see Fig.2, the connector is formed as part of the circuit board 26); the connector housing includes a plurality of connection terminals that are secured to the connector housing (this is inherent, as can be inferred from Fig.2, which shows plural connection terminals connected with the circuit board and components); and the connection terminals of the connector housing are connected with the at least one electric circuit component of the control circuit board and are

connectable with corresponding terminals of the external connector (also inherent, as can be inferred from Fig.2).

Regarding claim 2, Fig.1 shows the control circuit board 26 installed in gear housing 40/42/52 after the motor 10 has been connected to the gear housing.

Regarding claim 13, the plane of the control circuit board 26 is perpendicular to the rotational axis of the gear housing output shaft (Fig.1).

7. Claims 1-2 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Niki et al. (JP10-146008). Niki teaches a small-sized motor including a motor main body 2 that is rotated upon energization of the motor main body; a speed reducing unit that includes: a speed reducing mechanism 25/26 that reduces rotational speed of the motor main body; and a gear housing 3 that receives the speed reducing mechanism; a control circuit board (Fig.1) that is held in the gear housing 3 and has at least one electric circuit component (Fig.1); a connector housing 10 (Figs.3-5) that is provided on the gear housing and is connectable with an external connector (not shown, connects with terminals 14c-16c, Fig.4), wherein the connector housing is formed separately from the gear housing (see Fig.3); the connector housing includes a plurality of connection terminals 14-16 that are secured to the connector housing (Figs.3-5) and the connection terminals 14b-16b of the connector housing are connected with the at least one electric circuit component of the control circuit board and the connection terminals 14c-16c are connectable with corresponding terminals of the external connector. Regarding claim 2, the method of manufacture of the circuit board and motor apparatus in applicant's invention is not germane to the apparatus itself, and Niki's apparatus anticipates applicant's apparatus.

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Regarding claim 13, the plane of the control circuit board is perpendicular to the rotational axis of the gear housing output shaft 26 (Fig.1).

*Allowable Subject Matter*

8. Claims 3, 5-12 and 14-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claim 4, by virtue of its dependence from claim 3, would be allowable after amendment to overcome the rejection under 35 USC 112, second paragraph.

Regarding claims 3 and 5, the prior art, in particular Schwital or Niki, does not teach or suggest a gear housing including a circuit board installation opening, through which the control circuit board is installed into the gear housing; and the circuit board installation opening is provided with a closing and securing member, wherein the closing member closes the circuit board installation opening such that the closing and securing member holds the control circuit board in a predetermined position in the gear housing.

Regarding claim 6, in Schwital or Niki, there is only one connector installation opening.

Regarding claim 7, the prior art, in particular Schwital or Niki, does not teach or suggest a gear housing including: a circuit board installation opening, through which the control circuit board is installed into the gear housing; and a connector installation opening, to which the connector housing is secured; and the circuit board installation opening and the connector installation opening have a generally identical shape and size.

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Regarding claim 8, the prior art, in particular Schwital or Niki, does not teach or suggest the motor main body includes a brush holder member, wherein the brush holder member holds a plurality of power supply brushes and includes a resilient sealing member; and the resilient sealing member seals a connection between the motor main body and the gear housing and includes a connector sealing portion, which seals a connection between the gear housing and the connector housing.

Regarding claims 9 and 12, the prior art in particular Schwital or Niki, does not teach or suggest that the gear housing includes: a circuit board installation opening, through which the control circuit board is installed into the gear housing; and a connector installation opening, to which the connector housing is secured; and the circuit board installation opening is oriented in a direction, which is the same or different from that of the connector installation opening.

Regarding claim 14, the circuit board of Schwital and Niki are perpendicular to the output axis.

Regarding claim 15, in Schwital and Niki, the connector housing is not clamped between the gear housing and the inner panel of a vehicle door, with the motor arranged on an exterior side of the inner panel.

### *Conclusion*

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Burton S. Mullins whose telephone number is 571-272-2029.

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The examiner can normally be reached on Monday-Friday, 9 am to 5 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on 571-272-2034. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Burton S. Mullins  
Primary Examiner  
Art Unit 2834

bsm  
22 June 2004